

Claims

We claim:

5 1. A semiconductor package comprising:

a package substrate having a first surface;

an integrated circuit electrically coupled to the first surface of the package substrate, the
integrated circuit and the package substrate together forming the semiconductor
package; and

a first inductance circuit formed within the semiconductor package; and

a second inductance circuit formed within the semiconductor package,

wherein the first inductance circuit is coupled in parallel to the second inductance circuit,
and

wherein the first and second inductance circuits have substantially symmetrical geometric
characteristics.

2. A semiconductor package comprising:

a package substrate having a first surface;

5 an integrated circuit electrically connected to said first surface of said package substrate,
said integrated circuit and said package substrate together forming said
semiconductor package, the integrated circuit and package substrate including
frequency synthesizer circuitry; and

10 at least one inductance circuit formed entirely within said semiconductor package and
formed at least partially between said integrated circuit and said package
substrate, the inductance circuit at least in part determining an output frequency
for the frequency synthesizer circuitry;

15 wherein said frequency synthesizer circuitry has an output frequency selectably operable
within a plurality of bands, and wherein said at least one inductance circuit forms
part of a controlled oscillator circuit within said frequency synthesizer circuitry,
the output frequency being dependent upon the controlled oscillator circuit.